

TEST 1.0 Scheduled NOAAnet Outage at a WFO

TESTED BY: _____ DATE/TIME: _____ ITERATION: _____

This is a test of AWIPS SOP for a scheduled outage of the customer edge (Juniper SSG 550) router at a WFO site. The test is to be completed by NOC personnel in coordination with the site and the AWIPS NCF.

Time Required: 15 min

Step	Action	Expected Outcome	Comments	Pass	
				Y	N
1	The NOC contacts the NCF to request a scheduled maintenance outage of the customer edge (CE) router.				
2	The NCF contacts the site to schedule a maintenance outage of the CE router and notifies the NOC of the scheduled time.				
3	The NCF notifies the site of the scheduled maintenance action and requests authorization to place the site on ADTRAN.				

test 1.0 continues on the next page

Step	Action	Expected Outcome	Comments	Pass	
				Y	N
4	The NCF places the site on ADTRAN when authorized.		Outage time:		
5	NCF monitors network performance using MRTG while on ADTRAN.	No system instability or other problems while running on ADTRAN.			
6	The NCF notifies the NOC that the site is ready for maintenance.				
7	The NOC completes the maintenance action and reboots the CE router, if required.				
8	The NOC notifies the NCF the scheduled maintenance is complete.		Time of notification:		
9	The NCF restores NOAAnet services to the site.		Time of restoration:		
10	The NCF notifies the site communications are restored.		Time of notification:		
	End of test				

Witnessed By: _____ **Date:** _____ **Overall Outcome:** ☐ Pass ☐ Fail

TEST 1.1 Unscheduled NOAAnet Outage at a WFO

TESTED BY: _____ DATE/TIME: _____ ITERATION: _____

This is a test of AWIPS SOP for an unscheduled NOAAnet outage at a WFO site. The senario tests the AWIPS NCF response to a loss of communications. The test is to be completed by the site ESA in coordination with the MIC, HIC, or Branch Chief; the Lead Forecaster; and the OAT Director.

Time Required: 30 min

Step	Action	Expected Outcome	Comments	Pass	
				Y	N
1	Disconnect the cables connecting AWIPS routers 1 and 2 and the customer edge (CE) router from the CE router.		Outage time:		
2	The NCF detects the outage, places the site on the ADTRAN, and notifies the site. Continue with the test while waiting for NCF notification.	The NCF notifies the site of the outage.	NCF response time:		
3	Maintain this failover configuration for a few minutes. Assess the system's performance while running solely on the ADTRAN.	No system instability or other problems while running on ADTRAN.			

test 1.1 continues on the next page

Step	Action	Expected Outcome	Comments	Pass Y N	
Restore System to Normal Configuration					
4	Return the AWIPS cables to the CE router and notify the NCF.	AWIPS routers are reconnected to NOAAnet.			
5	NCF will verify connectivity.				
6	NCF restores NOAAnet communications and notifies the site.		Notification time:		
	End of test				

Witnessed By: _____ Date: _____ Overall Outcome: ☐ Pass ☐ Fail

TEST 1.2 Unscheduled NOAAnet Outage at a WFO

TESTED BY: _____ DATE/TIME: _____ ITERATION: _____

This is a test of AWIPS SOP for an unscheduled NOAAnet outage at a WFO site. The senario tests the NOC response to a loss of communications. The test is to be completed by the site ESA in coordination with the MIC, HIC, or Branch Chief; the Lead Forecaster; and the OAT Director.

Time Required: 30 min

Step	Action	Expected Outcome	Comments	Pass	
				Y	N
1	Contact the NCF to place the site on ADTRAN.				
2	The NCF places the site on ADTRAN and notifies the site.				
3	The NCF monitors system's performance using MRTG while running solely on ADTRAN.	No system instability or other problems while running on ADTRAN.			
4	Disconnect the NOAAnet cable from the customer edge (CE) router.		Outage time:		
5	The NOC detects the outage and notifies the NCF. Continue with the test while waiting for NOC notification.				

test 1.2 continues on the next page

Step	Action	Expected Outcome	Comments	Pass Y N	
6	The NCF notifies the site the outage has been detected.		Response time:		
Restore System to Normal Configuration					
7	Return the NOAAnet cable to the CE router and notify the NCF.	AWIPS is reconnected to NOAAnet.			
8	NCF will verify connectivity.				
9	NCF restores NOAAnet communications and notifies the site.		Notification time:		
	End of test				

Witnessed By: _____

Date: _____

Overall Outcome: ☐ Pass ☐ Fail

TEST 2.0 Scheduled NOAAnet Outage at a RFC

TESTED BY: _____ DATE/TIME: _____ ITERATION: _____

This is a test of AWIPS SOP for a scheduled outage of the customer edge (CE) routers at a RFC site. This test will be completed by NOC personnel in coordination with the AWIPS NCF. It is assumed CE router 1 is active and CE router 2 is idle prior to the maintenance action.

Time Required: 15 min

Step	Action	Expected Outcome	Comments	Pass	
				Y	N
1	The NOC contacts the NCF to request a scheduled maintenance outage of the CE routers.				
2	The NCF monitors network performance using MRTG and the NOC monitors performance using NetScout during the maintenance action.	The system remains stable and fully supports AWIPS communications.			
3	The NCF authorizes maintenance on the idle CE router (router 2).		Outage time:		
4	The NOC completes maintenance on router 2, reboots the router if required, and notifies the NCF.				

test 2.0 continues on the next page

Step	Action	Expected Outcome	Comments	Pass	
				Y	N
5	The NCF tests the connectivity of CE router 2.				
6	The NOC places NOAAnet traffic on CE router 2 and notifies the NCF CE router 1 is ready for maintenance.				
7	The NOC completes maintenance on router 1, reboots the router if required, and notifies the NCF.				
8	The NCF tests the connectivity of CE router 1.				
9	The NOC places NOAAnet traffic on router 1 and notifies the NCF.		Time of notification:		
	End of test				

Witnessed By: _____

Date: _____

Overall Outcome: ☐ Pass ☐ Fail

TEST 2.1 Unscheduled NOAAnet Outage at a RFC

TESTED BY: _____ DATE/TIME: _____ ITERATION: _____

This is a test of AWIPS SOP for an unscheduled outage of a customer edge (Juniper SSG 550) router at a RFC site. The test will be completed by the site ESA in coordination with the HIC, the Lead Forecaster, and the OAT Director. The response of the AWIPS NCF to a network outage is tested.

Time Required: 30 min

Step	Action	Expected Outcome	Comments	Pass	
				Y	N
1	Disconnect the cables connecting AWIPS routers 1 and 2 from the active customer edge (CE) router.		Outage time:		
2	The NCF detects the outage, places the site in backup mode, and notifies the site. Continue with the test while waiting for NCF notification.	The NCF notifies the site of the outage.	NCF response time:		
3	Maintain this failover configuration for a few minutes. Assess the system's performance while running in backup mode.	The system remains stable with no degradation of AWIPS communications.			

test 2.1 continues on the next page

Step	Action	Expected Outcome	Comments	Pass Y N	
Restore System to the Normal Operational Configuration					
4	Return the AWIPS cables to the CE router.	AWIPS routers are reconnected to NOAAnet.			
5	The NCF tests the connectivity of the restored CE router.				
6	Note the time NOAAnet services were restored.		Restoration time:		
	End of test				

Witnessed By: _____ Date: _____ Overall Outcome: ☐ Pass ☐ Fail

TEST 3.0 Scheduled Maintenance Outage at NCF

TESTED BY: _____ DATE/TIME: _____ ITERATION: _____

This is a test of AWIPS SOP for a scheduled outage of the customer edge (CE) routers at the AWIPS NCF. The test will be completed by NOC personnel in coordination with the AWIPS NCF. It is assumed CE routers 1 and 2 are in load-sharing mode prior to the test.

Time Required: 30 min

Step	Action	Expected Outcome	Comments	Pass	
				Y	N
1	The NOC contacts the NCF to request a scheduled maintenance outage of CE router 1.				
2	The NCF monitors network performance using MRTG and the NOC uses NetScout to monitor network performance during the maintenance action.	The system remains stable with full support to AWIPS communications.			
3	NOC routes all AWIPS traffic through CE router 2 and notifies the NCF.		Outage time:		
4	The NOC completes maintenance on the idle CE router 1, reboots the router if required, and notifies the NCF.		Time of notification:		

test 3.0 continues on the next page

Step	Action	Expected Outcome	Comments	Pass	
				Y	N
5	The NCF tests the connectivity of CE router 1.	CE router 1 is fully functional.			
6	NOC routes all AWIPS traffic through CE router 1 and notifies the NCF.				
7	The NOC completes maintenance on the idle CE router 2, reboots the router if required, and notifies the NCF.		Time of notification:		
8	The NCF tests the connectivity of router 2.	CE router 2 is fully functional.			
9	The NOC restores the network to its normal operational mode.		Time of restoration:		
10	The NOC notifies the NCF NOAA net communications are fully restored.		Time of notification:		
	End of test				

Witnessed By: _____ Date: _____ Overall Outcome: ☐ Pass ☐ Fail

TEST 3.1 Unscheduled Outage of a NCF CE Router

TESTED BY: _____ DATE/TIME: _____ ITERATION: _____

This is a test of AWIPS SOP for an unscheduled outage of a customer edge (CE) router at the AWIPS NCF. The test will be completed by the NCF ESA in coordination with the Government NCF point of contact and the OAT Director.

Time Required: 15 min

Step	Action	Expected Outcome	Comments	Pass Y N	
1	Disconnect the network cable from one CE router.		Outage time:		
2	The NOC detects the outage and notifies the NCF. Continue with the test while waiting for NOC notification.		NOC response time:		
3	Maintain the failover configuration for a few minutes. Assess the system performance while running in backup mode.	The system remains stable with full support for AWIPS communications.			
Restore System to Normal Configuration					
4	Return the network cable to the CE router.	AWIPS router is reconnected to NOAAnet.			
5	The NOC tests the connectivity of the CE router.				

test 3.1 continues on the next page

Step	Action	Expected Outcome	Comments	Pass	
				Y	N
6	NOC notifies the NCF NOAAnet has been returned to operational mode.		Notification time:		
	End of test				

Witnessed By: _____ Date: _____ Overall Outcome: ☐ Pass ☐ Fail